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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/064,984	09/06/2002	Martin Schottler	P 6874.6 US	1832
30008	7590	10/01/2003	EXAMINER	
GUDRUN E. HUCKETT LONSSTR. 53 WUPPERTAL, 42289 GERMANY			PHAM, MINH CHAU THI	
			ART UNIT	PAPER NUMBER
			1724	

DATE MAILED: 10/01/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

AS

# Office Action Summary

Application No.

10/064,984

Applicant(s)

SCHOTTLE, MARTIN

Examiner

Minh-Chau T. Pham

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

***Claim Objections***

1. Claims 1-19 are objected to because of the following informalities: Although numerical designations in the claims are permissible, the claims should be defined with proper structural limitations of the elements and their interrelationship with proper nexus. Appropriate correction is required.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-4 and 7-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suwa (6,033,301; 1, 2, 4, 5 & 6 in Figs. 4a & 4b; col. 1, lines 15-23 and lines 39-64; col. 2, lines 15-38).

Suwa discloses a device and a method for exhaust air processing of clean rooms comprising at least one fresh air supply (4) and at least one exhaust air device (5) connected to a work room (1), at least one processing device (2) arranged in the work room, at least one supply line (4) and at least one exhaust air line (5) connected to at least one processing device (2) wherein at least one exhaust air line (5) is connected at least to one of the supply line of the at least one processing device (2) and at least one fresh air supply line of the work room (1), one filter is an ion exchanger or chemical filter, a second filter connected parallel or in series to the first filter (see Figs. 4a & 4b) and the filter can remove various acid agents such as hydrofluoric acid and hydrochloric

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acid and neutralize any reagent gases escaping into the air. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to provide a device and method for exhaust air processing of clean rooms as taught by Suwa since provide a fan filter unit which facilitates the selective removal of hazardous gases from a specific clean room work area.

4. Claims 5, 6 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suwa (6,033,301; 1, 2, 4, 5 & 6 in Figs. 4a & 4b; col. 1, lines 15-23 and lines 39-64; col. 2, lines 15-38), as applied supra to paragraph 3 above, in view of Hasegawa et al (5,828,572; 9a-c, 10 & 11 in Fig. 1; col. 3, lines 5-22; col. 4, lines 20-35).

Claims 5, 6 and 15 call for a sensor arranged in the exhaust air line for risk detection. Hasegawa et al disclose a sensor (9 a-c) for particle sensor and temperature sensor or for risk detection. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to provide a sensor as taught by Hasegawa et al in the apparatus of Suwa so that the sensor would help determine whether an abnormality occurs in the system and appropriately warns the user.

### ***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Suzuki et al (4,699,640) disclose a clean room.
- Satoh et al (5,122,170) disclose an apparatus for preventing clouding of a semiconductor wafer.
- Honda et al (5,169,418) disclose a clean room arrangement.

- Chen et al (5,350,336) disclose a method of manufacturing semiconductor circuit devices.
- Negafune et al (5,827,339) disclose an apparatus for generating chemical free dry air.
- Hasegawa et al (5,828,572) disclose a processing system for semiconductor device.
- Suwa (6,033,301) discloses a filter unit for a clean room.
- Renz (6,306,189 B1) discloses a clean room.
- Renz (6,358,139 B1) discloses a super clean air device.
- Sasaki et al (6,572,468 B1) disclose a dean room device.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Minh-Chau T. Pham whose telephone number is (703) 308-1605. The examiner can normally be reached on Mon/Tues/Thur/Fri 7:00 am - 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Blaine Copenheaver can be reached on (703) 308-1261. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

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A handwritten signature in black ink, appearing to read 'Minh-Chau Pham', written in a cursive style.

**Minh-Chau Pham**

**Patent Examiner**

September 27, 2003